

# Executive Summary



EXERCISE & SPORTS SCIENCE AUSTRALIA

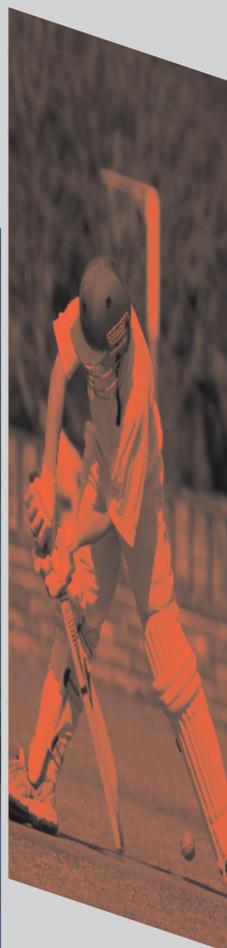
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# PROFILING THE AUSTRALIAN HIGH PERFORMANCE AND SPORTS SCIENCE WORKFORCE

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# EXECUTIVE SUMMARY

Australia is viewed as leader in the field of sports science, with Australian sports scientists highly sought after and respected worldwide (1). However, despite the important contribution of sports scientists to the development of professional sport in Australia (1-3), we know little about these sport professionals who play an important role in the development and success of athletes, teams and sport organisations.

This report provides a more formal understanding of the high performance and sports science workforce with the purpose of informing the policy development of Australia's sport governing bodies and education providers to inform sport management practices that will enhance the support and development of current and future high performance managers and sports scientists. The data presented in this report provides valuable insight about the scope of the profession to enable further development of strategic plans for the industry.

## Aims of this study

The research team of the present study set out to better understand the Australian High Performance and Sports Science workforce by examining: 1) the size and capacity of the high performance and sport science workforce; 2) what roles high performance managers and sport scientists perform; 3) their salary and conditions of employment; 4) their work environment; 5) their training and professional development; 6) their career pathways and future intentions; and 7) their opinions about their profession. We also wanted to know about the human resource

management practices of sport organisations that employ members of the high performance and sport science workforce.

## Method

This research project was a cross-sectional, predominantly quantitative study to collect population data of the Australian High Performance and Sports Science workforce, and the Sport Administrators that employ them. Two independent online survey instruments were employed to collect data from these two participant groups. Participants in this research project were Australian High Performance and Sports Science employees (n = 210) and Sports Administrators (n = 32).

## Results and Recommendations

### Characteristics of the Workforce

The high performance/sports science workforce is predominantly young, male and relatively inexperienced. However, they are also highly qualified, many possessing or currently completing, tertiary qualifications beyond what was required for their current position. A large proportion of the workforce are not associated with any professional organisation such as ESSA. This presents a problem for the industry as much of the high performance/sport science work is performed without either direct or indirect quality assurance by way of regulation or at least professional accreditation. Nevertheless, the majority view of the workforce and their administrators is that accreditation is

desirable and should become a requirement for employment.

### Employment Conditions and Roles

When considering the characteristics of the work performed by high performance/sports science professionals, work outside of normal office hours and/or overtime (mostly unpaid) is common, tasks performed often require people management skills (which is not part of their undergraduate or post graduate training) and they are required to behave ethically. A high rate of unpaid overtime could cause a variety of problems for the work force such as burnout. A third of the workforce are actively seeking other employment and the most popular reasons for this include “the heavy workload” and perceptions of “insufficient support”.

### Professional Development Activities

High performance/sports science professionals are required to behave ethically and yet only half receive ethics training in their workplace, while the requirement for ethics training in formal education programs are not well defined. A lack of training in professional ethics across the entire workforce misses an important opportunity to reduce the risk of unethical behaviour by providing behavioural guidelines and disincentives.

High performance/sport science staff indicated that their highest professional development needs were not being met by either the industry or their employer with over half having to fund their own development. Key barriers for continued professional development were a lack of time due to high rates of unpaid overtime work, a lack of opportunities from industry and poor support from employers in terms of funding. The activities that participants nominated as having the greatest impact on their professional development were formal qualification upgrades, networking and mentoring.

### Career Pathways and Future Career Intentions

From a career development perspective, participants were highly motivated to work in elite and professional sport with the pathway into their career mostly through internships or strength and conditioning coaching. A large proportion are looking to advance their career with a different employer citing dissatisfaction with their current employer (mostly state institute-based employees) due to high job strain/stress and the negative impact the long hours has on work/life balance and family/relationships.

### Views on the High Performance and Sports Science Profession

A large proportion of the workforce are not associated with any professional organisation such as ESSA. The majority of high performance/sports science professionals believed that ESSA membership was not required for their position and is not of value to them. Many believe ESSA, in its current form, is not best placed to take on this role. This presents a problem for the industry as much of the high performance/sport science work is performed without either direct or indirect quality assurance by way of regulation or at least professional accreditation. Despite this, the high performance/sports science workforce and the administrators that employ them agree that accreditation and registration should become an industry standard and that regulation of the profession will improve professional standards.

### Sports Administrator Survey

The recruitment processes experienced by the workforce highlight that many positions are not advertised, many organisations do not follow “best practice” induction procedures, staff possess tertiary qualifications beyond what was required for their position and many are pursuing higher degrees. The human resource management of the high performance/sports science workforce is compromised by a lack of funding and resources to support and develop staff. Administrators and the high performance/sports science workforce value professional development (PD),

however, opportunities for this is limited by a lack of PD resources within organisations and by the expectation of staff to work longer (than contracted) hours.

Sports administrators and managers believe high performance/sports science professionals are a valuable asset to their organisation and indicate that they would employ more (and provide better support if they had the funding to do so.

### Key Recommendations

#### 1. Definition and scope of practice

As a precursor to future development and regulation of the sport science profession, a definition of a sport scientist and their scope of practice needs to be agreed. The definition drafted below, and the data provided in this report, should serve as a starting point for ESSA to lead this process.

*“An Australian sports scientist is a university trained and nationally accredited, skilled practitioner and/or researcher engaged in supporting, developing and enhancing sport performance of athletes and coaches engaged in individual and team sports. In providing those performance enhancement services, sports scientists use evidence-based methods that ensure the protection of the health and welfare of the people they serve. They do so in an ethical manner within their scope of practice and discipline training. Sports scientists work in a variety of settings and can work as consultants, permanent employees, be self-employed or volunteers. Sports scientists are able to specialise in sub-disciplines such as: biomechanics, exercise/sport physiology, performance analysis and skill acquisition.”*

Other service providers within sport contribute to the work of sport scientists and therefore may be considered sport scientists in some sport settings.

These include: dietitians, physiotherapists, strength and conditioning coaches and sport psychologists.

#### 2. Registration and accreditation

ESSA should foster the establishment of a national registration and accreditation scheme for the High Performance and Sport Science profession. The profession and those who manage these professionals, overwhelmingly support the need for a scheme, that accreditation should be based on qualifications and that employment should be dependent upon accreditation.

#### 3. Ethical practice

Almost all employment contracts highlighted the importance of ethical conduct and the workforce also rate it as the third most important requirement for employment, yet only half of the workforce receive training in professional ethics. ESSA should use its experience in the oversight of ethical practice and its likely involvement in accreditation and professional development, to increase the rate of training in ethical practice in the profession.

#### 4. Professional development

A majority of the workforce agree that continuing professional development should be compulsory. While many professionals feel that their employer would provide time to engage in professional development opportunities, nearly half of the profession do not complete any professional development. ESSA should consider its future potential role as a facilitator and or provider of professional development opportunities that are relevant to the High Performance and Sport Science workforce.

### 5. Human resource management practices and workforce retention

Sport organisations need to develop human resource management practices that both support and develop sports scientists and high performance managers in their roles and in their career development. The risk of inappropriate practice as well as worker stress, dissatisfaction, turnover and subsequent loss of corporate knowledge may be mitigated with improvements in organisational HRM practices. Sport organisations should be required to implement minimum human resource management standards and be supported in their capacity to do so.

### 6. Future research

A stronger evidence-base is required to underpin industry decision making related to the sport science profession. Future research should focus on investigating:

- i. The views of other key stakeholders (e.g. policy makers, professional bodies, athletes, allied health professionals, university educators) related to sports science provision, professional training and regulation
- ii. Best practice models in professional training and regulation, including international standards and practices
- iii. Scope of practice for sport scientists, both collectively and within key sub-discipline areas
- iv. Consequences of inadequate professional support to existing sport scientists and the outcomes of future interventions to develop the profession.



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